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doi: 10.1136/hrt.2006.088260

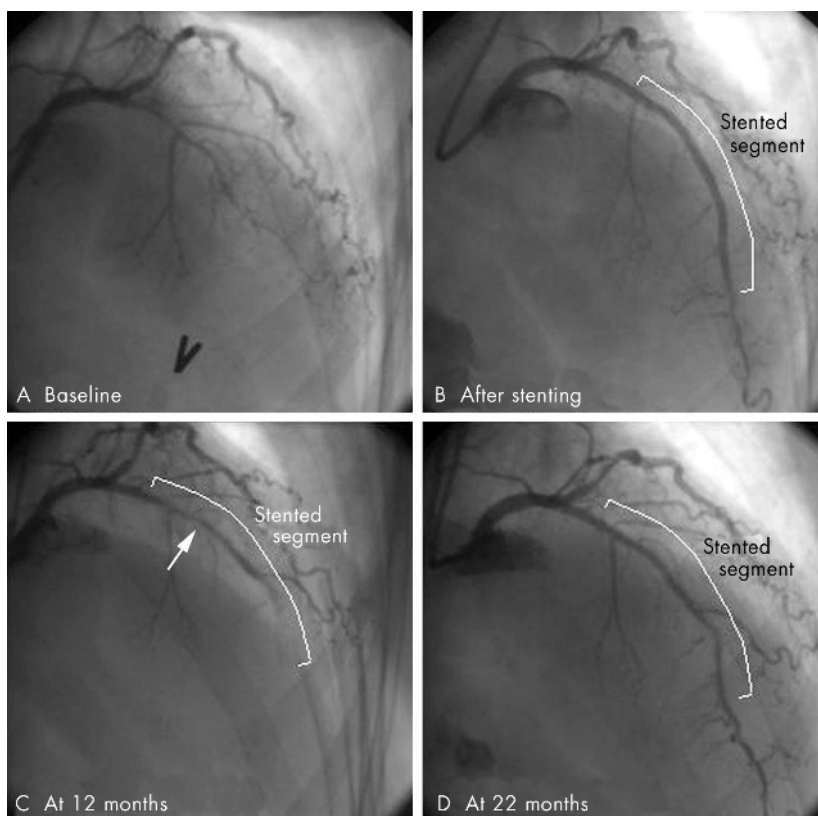
Late thrombosis or in-stent restenosis?

A 55-year-old hypertensive and hypercholesterolaemic woman presenting with non-Q wave myocardial infarction received four 18 mm long sirolimus eluting stents for diffuse atherosclerosis of the left anterior descending (LAD) coronary (panel A, pretreatment; panel B, after stenting). She received double antiplatelet treatment (aspirin and clopidogrel) for six months, after which clopidogrel was stopped.

At one year, routine exercise scintigraphy showed inducible anterior myocardial ischaemia. Three weeks later, angiography indicated total occlusion (type IV restenosis) of the mid LAD (panel C) with type III (diffuse) restenosis of the mid-proximal segment (arrow). The distal LAD received collateral flow from the right coronary artery. Because the patient had been absolutely asymptomatic in the past months, in-stent thrombosis was assumed to be unlikely and it was decided not to attempt repeat revascularisation.

Another 10 months later, the patient was admitted for unstable angina. At this time, angiography showed complete recanalisation of the LAD with residual type II (proliferative) restenosis (panel D), and no collateral circulation from the right coronary artery. Balloon-only angioplasty was performed with a good final outcome.

In-stent thrombosis most commonly presents acutely, with a > 70% incidence of myocardial infarction and > 25% of death. In the case presented here, both the clinical presentation and the angiographic pattern were more consistent with a type III-IV in-stent restenosis, but (late) in-stent thrombosis might have mimicked this angiographic appearance, and the collateral flow might have masked the acute symptoms. We conclude that, because the possibility of in-stent thrombosis cannot be discarded a priori, cardiologists should always consider performing repeat revascularisation, including in the case of totally occlusive lesions.



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